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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/870,052	05/30/2001	Gerald L. Swift	00AN170	7166

7590

03/16/2004

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EXAMINER

ELKASSABGI, HEBA

ART UNIT

PAPER NUMBER

2834

DATE MAILED: 03/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/870,052

Applicant(s)

SWIFT ET AL.

Examiner

Heba Elkassabgi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) ~~28-30~~ 31-35 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-26 is/are allowed.
- 6) ☒ Claim(s) 28-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☒ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. 03/03/2004
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

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## **DETAILED ACTION**

### **EXAMINER'S AMENDMENT**

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with John Ling (Reg.#51,216) on 03/03/2004.

Claims 31-35 are canceled.

### ***Priority***

There is no domestic or foreign priority claimed.

### ***Information Disclosure Statement***

The information disclosure statement (IDS) submitted on 08/29/2001 is considered by the examiner. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement

***Drawings***

The drawings were received on 10/02/2003. These drawings are accepted by the examiner. The drawing objection stated in the previous office action is withdrawn, in light of applicant's amendment of the drawings.

***Claim Rejections - 35 USC § 112***

The 35 USC § 112, *sixth paragraph objection of claim 28 as indicted in the previous office action.*

The 35 USC § 112, *second paragraph objection of claim 28 and 29, as indicted in the previous office action.*

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 28 is rejected under 35 U.S.C. 102(b) as being anticipated by Amasino et al. (U.S. patent 3778891).

Amasino et al. discloses in figure#1 and columns 2 (line 26-68) and 3 (lines 1-60) an armature assembly for a motor having electrically conductive means (stator core 10) with a plurality of spaced apart teeth that delineate receiving means for electric field

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generation (coils 16), which when energized, provide an electric field. The means for electric field generation (coils 16), when energized provides an electric field that is associated with the receiving means (slot liners, 14) around at least some of the teeth. The means for retaining the means for electric field generation (coils 16) within the associated receiving means (slot liners 16) and for permitting flow of an encapsulation material (resin) into a void (grooves 29) associated with means for retaining, in order to facilitate attachment of an encapsulation material (resin) with the assembly. Furthermore, the encapsulation material (resin) is applied to a substantial portion of the armature assembly.

In regards to claim # 30 Amasino et al. disclose the claimed invention except for the encapsulation material being of thermally conductive polymer. It would have been obvious one having ordinary skill in the art at the time the invention was made to choose a suitable material, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshfn, i25 USPQ 416.

### ***Allowable Subject Matter***

The application has been amended as follows:

The following is an examiner's statement of reasons for allowance:

Independent claim #1 and #15 are allowed over the prior art.

In regards to claim 1, prior art discloses an armature assembly of a motor, having a core with a plurality of spaced apart teeth that define slots between adjacent teeth. In

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which windings are disposed in associated slots around at least some of the teeth, and a retaining system that is operatively associated with distal ends of the teeth to retain the windings within the associated slots. However, prior art does not disclose a retaining system having a non-planar surface that interfaces with the windings to define at least one void that permits flow of an encapsulation material into the void so as to facilitate attachment of the encapsulation material with the assembly.

In regards to claim 15, the prior art discloses an armature assembly for a linear motor having a core with a rectangular base, teeth that extend from the base and terminate in a distal end. The teeth are spaced apart from each other and extend longitudinally between opposed sides of the base to define an elongated slot between adjacent teeth. At least one set of windings surrounds at least one of the teeth. However, prior art does not disclose an outer covering of an injection molded material encapsulating at least a substantial part of the core and windings to help maintain the windings within the slots, in combination with a layer of varnish material applied to the core and the windings. The outer covering is applied over the varnish that encapsulates at least a substantial part of the core and windings.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Heba Elkassabgi whose telephone number is (571) 272-2023-2723. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on (571) 272-2044. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Heba Elkassabgi

3/3/04

**DANGLE  
PRIMARY EXAMINER**